

EPA Approves Experimental Use Permit to Test Innovative Biopesticide Tool to Better Protect Public Health

Today, after extensive evaluation of the best available science and public input, the U.S. Environmental Protection Agency (EPA) has granted an experimental use permit to Oxitec Ltd. to field test the use of its genetically engineered mosquitoes as a way to reduce populations of female mosquitoes that bite to protect public health from mosquito-borne illnesses, bacteria and transmit diseases.

Commented [DA1]: Isn't it modified?

"EPA looks forward to partnering with local communities to test a promising new tool that will help combat the spread of mosquito-borne diseases like the Zika virus," said Alexandra Dapolito Dunn, assistant administrator of EPA's Office of Chemical Safety and Pollution Prevention. [Is there another good message to highlight here?]

Commented [DA2]: I think we need to say something here about how important innovation and creativity is to controlling viruses/bacteria so that we can protect the public from harmful diseases. So very similar to what you have, but more focused on our efforts to advance science to protect public health. Also, I'm not sure this needs to be a quote, but leave that up to you.

After extensive evaluation and [HYPERLINK "<https://www.epa.gov/pesticides/epa-receives-request-experimental-permit-combat-mosquitoes>"]. EPA has granted an experimental use permit to Oxitec Ltd. to conduct field testing of its genetically engineered *Aedes aegypti* male mosquito. This carefully developed field test will be conducted in Monroe County, FL, in 2020, and in Harris County, Texas, in 2021. EPA will closely monitor the field test and will require that Oxitec collect data on the effectiveness of this means of vector control over a one-year period. The company must also receive state and local approval before proceeding with field testing.

During these field tests, Oxitec will release its genetically modified male mosquitoes into the environment where they will mate with wild female mosquitoes. The female offspring of this mating will die as larvae while male offspring will survive and become fully functional adults with the same genetic modification. Since female mosquitoes are the ones that bite people, there could be multi-generational effectiveness so that, ultimately, *Aedes aegypti* mosquito populations in the release area decline. EPA anticipates that will be an effective tool to combat the spread of certain mosquito-borne diseases like the Zika virus and dengue fever.

As the genetic modification would only be in the male mosquito, which does not bite, there would be no chance of the modification being passed on to people. It is also anticipated that there would be no adverse effects to other nontarget species.

Oxitec will collect data on the effectiveness of this means of vector control over a one-year period. The company must receive state and local approval before proceeding with field testing and Oxitec's permit is subject to stringent public health protections and conditions.

To read EPA's decision, and the approved permit, go to: [Insert link]